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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,863	02/23/2004	Torbjorn Sandstrom	2674-000022/US/COA	7077
30593 7590 06/27/2008 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER KIK, PHALLAKA				
ART UNIT 2825		PAPER NUMBER		
MAIL DATE 06/27/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/782,863

Applicant(s)

SANDSTROM ET AL.

Examiner

PHALLAKA KIK

Art Unit

2825

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-21 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/049,286.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date 2/23/04
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This Office Action responds to Application and IDS filed on 2/23/2004. Claims 1-21 are pending.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/049,286, filed on 9/8/2000.

Claim Objections

3. **Claims 3-5** are objected to because of the following informalities:

As per **claim 3**, "fractured" (line 2) should be --fracturing-- for proper antecedent basis.

As per **claim 4**, the claim is objected to for incorporating the above errors into the claim by claim dependency.

As per **claim 5**, "claim 1" (line 1) should be --claim 3-- to provide for proper antecedent basis for "the first format" (line 1).

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent,

except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. **Claims 1-21** are rejected under 35 U.S.C. 102(e) as being anticipated by Nakao (US Patent No. 5,962,172).

As per **claims 1-4,11,16,18-19**, Figs. 1 and 2 illustrate the elements of the claims, wherein the sorting or arrangement or placement of the received pattern data is performed by the arithmetic processing means 401 and drawing control means 501, which calculates and places or sorts the data for proper format such that they are placed in proper data fields for proper shifting (i.e., in a second format), wherein such fields are considered as scanstrips since they are to be scanned or rasterized by the beam control means; wherein the rasterizing module further corresponds to raster scan EB drawing device of Fig. 17 (719), wherein such raster scan EB drawing device or Beam control means (701), Stage control means (601) and Drawing means 801 sequentially read and extracts the scanstrips or data fields and print it on the substrate; wherein such interface for loading the data are inherently included in the system to allow for the different tools and computer system to process the desired patterns and draws the patterns using the EB drawing device; wherein the iteratively repeating of the steps are further described in column 13, lines 31-43.

As per **claims 5,12,19**, the data pattern being selected from one of a hierarchical GDSII format, a flat MEBES format and a data format in algorithmic form, is within the scope of prior art, allowing various data formats to be accepted and used for drawing on

EB drawing device; or alternatively, it is within the scope of the prior art to use several processors to perform simultaneous operations, to speed up the processes.

As per **claims 6-7,17**, the sorting, reading and extracting performed by one or more processors so that fracturing of the pattern data is performed over parallel processing paths are at least shown in Fig. 2, wherein at least one or more of the various devices could operate in parallel.

As per **claims 8-10,13-15,20-21**, the multivalued bitmap data, including the electromagnetic quantity being electric potential is part of the operation of the EB drawing device, which use these type of data; and the surface of the SEBM is divided into subfields are illustrated in Fig. 12.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHALLAKA KIK whose telephone number is (571)272-1895. The examiner can normally be reached on Monday-Friday, 8AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Chiang can be reached on 571-272-7483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Any response to this action should be mailed to:

Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

or faxed to:

571-273-8300

/Phallaka Kik/
Primary Examiner, Art Unit 2825
June 23, 2008